

Title (en)
FORCE-LIMITING AND DAMPING DEVICE

Title (de)
KRAFTBEGRENZUNGS- UND DÄMPFUNGSVORRICHTUNG

Title (fr)
DISPOSITIF DE LIMITATION DE FORCE ET D'AMORTISSEMENT

Publication
EP 4342636 A1 20240327 (EN)

Application
EP 23196862 A 20230912

Priority
TW 111135405 A 20220919

Abstract (en)
A force-limiting and damping device has a body (10), a tapping element (20, 20C, 20D, 20E, 20I), an elastic element (30, 30F, 30I, 30J), and a reinforcing element (40, 40A, 40B, 40F, 40I). The body (10) has a connecting segment (11, 11E, 11F). The tapping element (20, 20C, 20D, 20E, 20I) is movably connected to the body (10) and has a mounting segment (21, 21F, 21I), a tapping segment (22, 22I), a fixing segment (23), and a protrusion segment (24, 24I). The protrusion segment (24, 24I) is formed between the mounting segment (21, 21F, 21I) and the tapping segment (22, 22I). The reinforcing element (40, 40A, 40B, 40F, 40I) is mounted on the tapping element (20, 20C, 20D, 20E, 20I) between the elastic element (30, 30F, 30I, 30J) and the tapping segment (22, 22I) and abuts against the protrusion segment (24, 24I).

IPC 8 full level
B25D 1/12 (2006.01); **A61B 17/92** (2006.01); **A61C 3/08** (2006.01); **B26B 23/00** (2006.01); **B25D 1/06** (2006.01)

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Citation (search report)
• [XYI] EP 3795301 A1 20210324 - SHIH JUI YUAN [TW]
• [Y] US 2021187721 A1 20210624 - STEINGRUBER ADRIAN [DE]
• [Y] US 2008277846 A1 20081113 - MOESSNANG FRANZ [DE]
• [Y] TW I741511 B 20211001 - SHI RUI YUAN [TW]
• [Y] EP 3560450 A2 20191030 - SHIH JUI YUAN [TW]
• [Y] CN 2341774 Y 19991006 - RUIAN CITY NO 2 TOOL FACTORY [CN]

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC ME MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)
BA

Designated validation state (EPC)
KH MA MD TN

DOCDB simple family (publication)
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DOCDB simple family (application)
EP 23196862 A 20230912; JP 2023149620 A 20230914; TW 111135405 A 20220919; US 202318465045 A 20230911